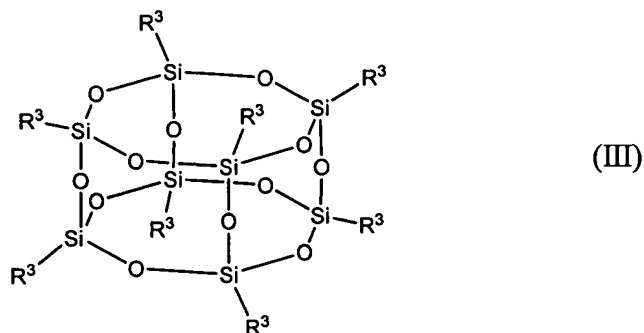


Amendments to the Claims:

1-40. (Canceled)

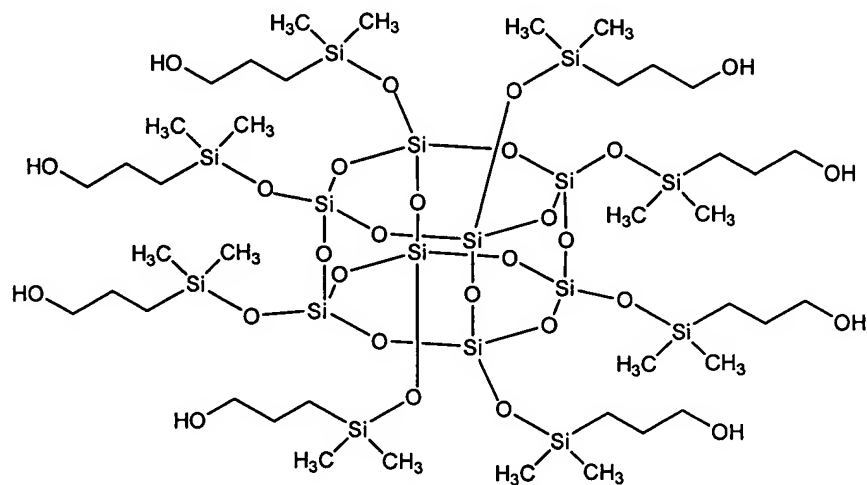
41. (Currently Amended) In a composition for use in microlithographic processes, wherein the composition comprises a constituent dissolved or dispersed in a solvent system, said constituent being selected from the group consisting of polymers, compounds, and mixtures thereof, the improvement being that said polymer includes recurring monomers comprising a polyhedral oligomeric silsesquioxane and that said compound comprises a polyhedral oligomeric silsesquioxane, said composition further comprising a cross-linking agent, wherein said composition ~~exhibits a percent stripping of less than about 5% when subjected to a stripping test.~~

42. (Original) The composition of claim 41, wherein said constituent has the formula

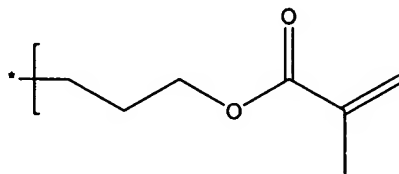


wherein each R³ is individually selected from the group consisting of hydrogen, alkyls, aryls, hydroxypropyldimethylsilyloxy, and olefinic moieties.

43. (Original) The composition of claim 42, wherein said constituent is a compound having the formula



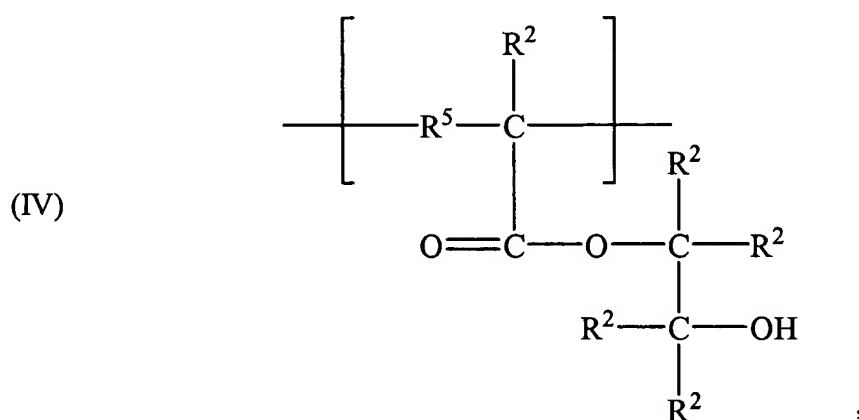
44. (Original) The composition of claim 42, wherein at least one R³ is



where "*" designates Si on (III).

45. (Previously Presented) The composition of claim 41, said constituent being a polymer, and said polymer further comprising recurring monomers having an alcohol functionality.

46. (Previously Presented) The composition of claim 45, said polymer comprising recurring monomers having the formula



wherein each R^2 is individually selected from the group consisting of hydrogen, alkyls, and aryls, and each R^5 is individually selected from the group consisting of alkyls and aryls.

47. (Original) The composition of claim 46, wherein the molar ratio of polyhedral oligomeric silsesquioxane to (IV) is from about 15:85 to about 30:70.

48. (Currently Amended) The composition of claim 41, said composition further comprising ~~an ingredient selected from the group consisting of cross-linking agents, catalysts, and mixtures thereof.~~

49. (Currently Amended) The composition of claim ~~41~~8, wherein said ~~ingredient is a~~ cross-linking agent is selected from the group consisting of aminoplast cross-linking agents.

50. (Canceled)

51. (Currently Amended) The composition of claim ~~50~~48, wherein said composition comprises a weak acid and a strong acid.

52. (Original) The composition of claim 41, wherein said composition gives a spin bowl compatibility test result of at least about 90%.

53. (Currently Amended) A structure used in microlithographic processes, said structure comprising:

a substrate; and

a layer on said substrate, said layer formed from a composition comprising a constituent dissolved or dispersed in a solvent system, said constituent being selected from the group consisting of polymers, compounds, and mixtures thereof, the improvement being that said polymer includes recurring monomers comprising a polyhedral oligomeric silsesquioxane and said compound comprises a polyhedral oligomeric silsesquioxane, said composition further comprising a cross-linking agent
~~said layer exhibiting a percent stripping of less than about 5% when subjected to a stripping~~
~~test.~~

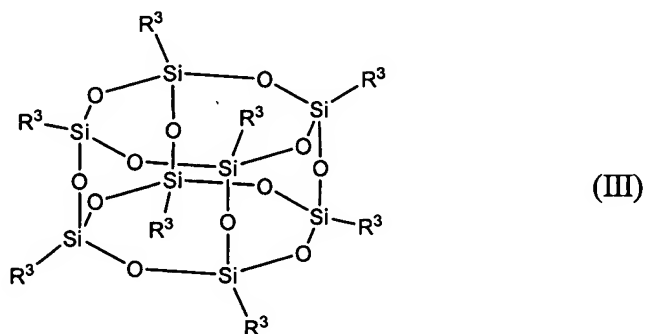
54. (Previously Presented) The structure of claim 53, said structure further comprising an anti-reflective coating between said substrate and said layer.

55. (Original) The structure of claim 53, said structure further comprising a photoresist adjacent said layer.

56. (Original) The structure of claim 54, said structure further comprising a photoresist adjacent said layer.

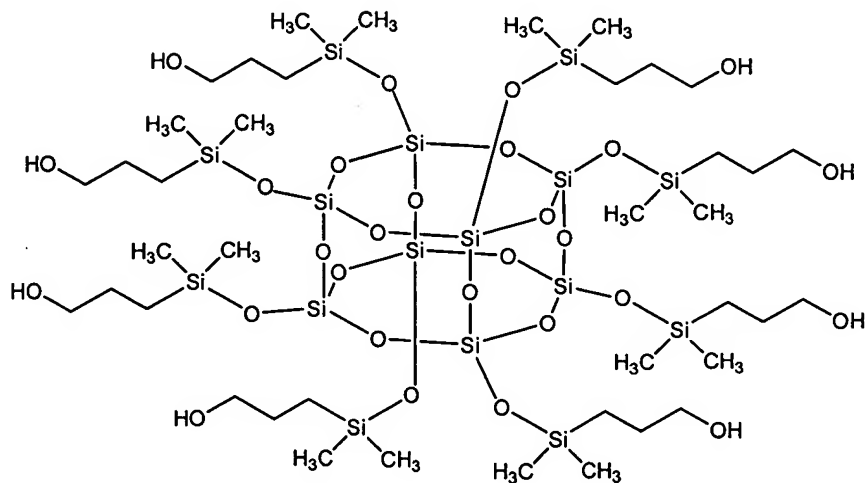
57. (Original) The structure of claim 53, wherein said substrate is selected from the group consisting of Si substrates, SiO₂ substrates, Si₃N₄ substrates, SiO₂ on silicon substrates, Si₃N₄ on silicon substrates, glass substrates, quartz substrates, ceramic substrates, semiconductor substrates, and metal substrates.

58. (Original) The structure of claim 53, wherein said constituent has the formula

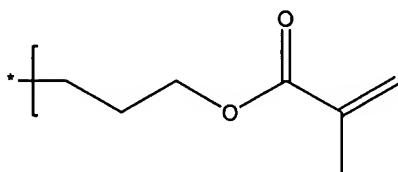


wherein each R³ is individually selected from the group consisting of hydrogen, alkyls, aryls, hydroxypropyldimethylsilyloxy, and olefinic moieties.

59. (Original) The structure of claim 58, wherein said constituent is a compound having the formula



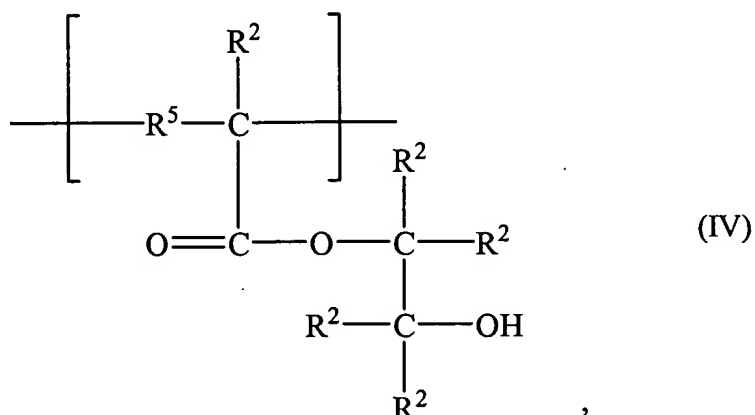
60. (Original) The structure of claim 58, wherein at least one R³ is



where "*" designates Si on (III).

61. (Previously Presented) The structure of claim 53, said constituent being a polymer, and said polymer further comprising recurring monomers having an alcohol functionality.

62. (Previously Presented) The structure of claim 61, said polymer comprising recurring monomers having the formula



wherein each R^2 is individually selected from the group consisting of hydrogen, alkyls, and aryls, and each R^5 is individually selected from the group consisting of alkyls and aryls.

63. (Currently Amended) The structure of claim 53, said composition further comprising ~~an ingredient selected from the group consisting of cross-linking agents, catalysts, and mixtures thereof.~~

64. (Currently Amended) The structure of claim 63, wherein said ~~ingredient is a cross-linking agent~~ is selected from the group consisting of aminoplast cross-linking agents.

65. (Canceled)

66. (Currently Amended) The structure of claim 635, wherein said composition comprises a weak acid and a strong acid.

67. (Original) The structure of claim 53, wherein said layer gives a spin bowl compatibility test result of at least about 90%.

68. (Original) The structure of claim 53, wherein said layer has a thickness of less than about 2,150 Å.

69. (Original) The structure of claim 55, wherein said photoresist has a thickness of less than about 200 nm.

70. (Original) The structure of claim 56, wherein said photoresist has a thickness of less than about 200 nm.

71. (Currently Amended) A method of forming a structure for use in microlithographic processes, said method comprising the steps of:

providing a substrate; and

forming a layer of a composition on the substrate, said composition comprising a constituent

dissolved or dispersed in a solvent system, said constituent being selected from the

group consisting of polymers, compounds, and mixtures thereof, the improvement

being that said polymer includes recurring monomers comprising a polyhedral

oligomeric silsesquioxane and that said compound comprises a polyhedral oligomeric

silsesquioxane, said composition further comprising a cross-linking agent ~~said layer~~

~~exhibiting a percent stripping of less than about 5% when subjected to a stripping~~

~~test.~~

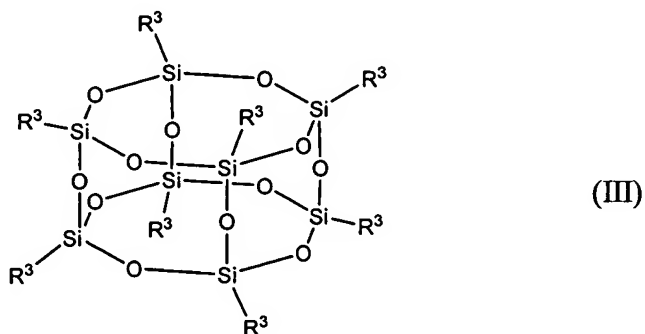
72. (Original) The method of claim 71, further including the step of applying an anti-reflective coating to said substrate, and wherein said layer forming step comprises applying the layer to said anti-reflective coating.

73. (Original) The method of claim 71, further including the step of applying a photoresist to said layer.

74. (Original) The method of claim 72, further including the step of applying a photoresist to said layer.

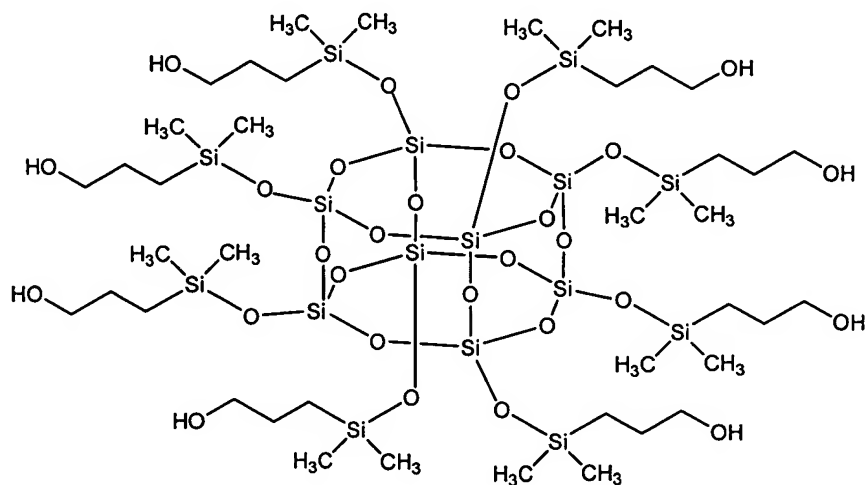
75. (Original) The method of claim 71, wherein said substrate is selected from the group consisting of Si substrates, SiO₂ substrates, Si₃N₄ substrates, SiO₂ on silicon substrates, Si₃N₄ on silicon substrates, glass substrates, quartz substrates, ceramic substrates, semiconductor substrates, and metal substrates.

76. (Original) The method of claim 71, wherein said constituent has the formula

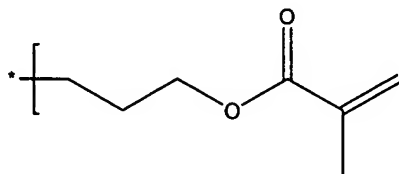


wherein each R³ is individually selected from the group consisting of hydrogen, alkyls, aryls, hydroxypropyldimethylsilyloxy, and olefinic moieties.

77. (Original) The method of claim 76, wherein said constituent is a compound having the formula



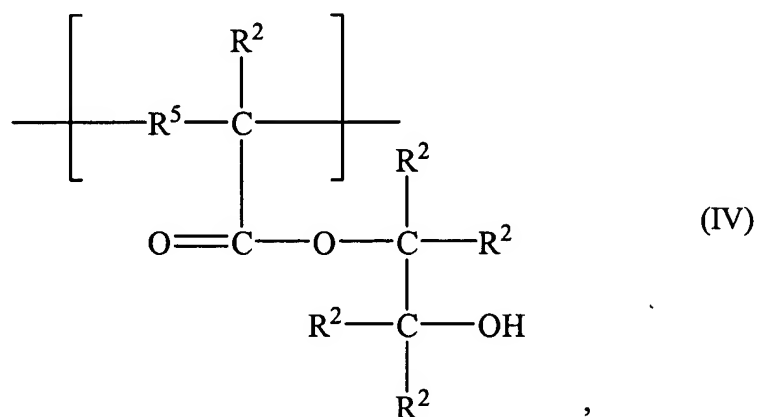
78. (Original) The method of claim 76, wherein at least one R³ is



where "*" designates Si on (III).

79. (Previously Presented) The method of claim 71, said constituent being a polymer, and said polymer further comprising recurring monomers having an alcohol functionality.

80. (Previously Presented) The method of claim 79, said polymer comprising recurring monomers having the formula



wherein each R² is individually selected from the group consisting of hydrogen, alkyls, and aryls, and each R⁵ is individually selected from the group consisting of alkyls and aryls.

81. (Currently Amended) The method of claim 71, said composition further comprising ~~an ingredient selected from the group consisting of cross-linking agents, catalysts, and mixtures thereof.~~

82. (Currently Amended) The method of claim 81, wherein said ~~ingredient is a cross-~~ linking agent is selected from the group consisting of aminoplast cross-linking agents.

83. (Canceled)

84. (Currently Amended) The method of claim 813, wherein said composition comprises a weak acid and a strong acid.

85. (Original) The method of claim 71, wherein said layer gives a spin bowl compatibility test result of at least about 90%.

86. (Original) The method of claim 71, further comprising the step of curing said layer, and wherein said cured layer has a thickness of less than about 2,150 Å.

87. (Original) The method of claim 73, further including the step of drying said photoresist, and wherein said dried photoresist has a thickness of less than about 200 nm.

88. (Original) The method of claim 74, further including the step of drying said photoresist, and wherein said dried photoresist has a thickness of less than about 200 nm.

89. (New) In a composition for use in microlithographic processes, wherein the composition comprises a constituent dissolved or dispersed in a solvent system, said constituent being selected from the group consisting of polymers, compounds, and mixtures thereof, the improvement being that said polymer includes recurring monomers comprising a polyhedral oligomeric silsesquioxane and that said compound comprises a polyhedral oligomeric silsesquioxane, wherein said composition comprises a weak acid and a strong acid.

90. (New) A structure used in microlithographic processes, said structure comprising:
a substrate;

a layer on said substrate, said layer formed from a composition comprising a constituent dissolved or dispersed in a solvent system, said constituent being selected from the group consisting of polymers, compounds, and mixtures thereof, the improvement being that said polymer includes recurring monomers comprising a polyhedral oligomeric silsesquioxane and said compound comprises a polyhedral oligomeric silsesquioxane; and

a photoresist adjacent said layer.

91. (New) A structure used in microlithographic processes, said structure comprising:
a substrate; and
a layer on said substrate, said layer formed from a composition comprising a constituent dissolved or dispersed in a solvent system, said constituent being selected from the group consisting of polymers, compounds, and mixtures thereof, the improvement being that said polymer includes recurring monomers comprising a polyhedral oligomeric silsesquioxane and said compound comprises a polyhedral oligomeric silsesquioxane, wherein said composition comprises a weak acid and a strong acid.
92. (New) A method of forming a structure for use in microlithographic processes, said method comprising the steps of:
providing a substrate;
forming a layer of a composition on the substrate, said composition comprising a constituent dissolved or dispersed in a solvent system, said constituent being selected from the group consisting of polymers, compounds, and mixtures thereof, the improvement being that said polymer includes recurring monomers comprising a polyhedral oligomeric silsesquioxane and that said compound comprises a polyhedral oligomeric silsesquioxane; and
applying a photoresist to said layer.

93. (New) A method of forming a structure for use in microlithographic processes, said method comprising the steps of:

providing a substrate;

applying an anti-reflective coating to said substrate;

forming a layer of a composition on the said anti-reflective coating, said composition comprising a constituent dissolved or dispersed in a solvent system, said constituent being selected from the group consisting of polymers, compounds, and mixtures thereof, the improvement being that said polymer includes recurring monomers comprising a polyhedral oligomeric silsesquioxane and that said compound comprises a polyhedral oligomeric silsesquioxane; and

applying a photoresist to said layer.

94. (New) A method of forming a structure for use in microlithographic processes, said method comprising the steps of:

providing a substrate; and

forming a layer of a composition on the substrate, said composition comprising a constituent dissolved or dispersed in a solvent system, said constituent being selected from the group consisting of polymers, compounds, and mixtures thereof, the improvement being that said polymer includes recurring monomers comprising a polyhedral oligomeric silsesquioxane and that said compound comprises a polyhedral oligomeric silsesquioxane, wherein said composition comprises a weak acid and a strong acid.